# ATTACHMENT J

# GEOMORPH® OVERVIEW ITERATIVE INVESTIGATION PROCESS TITTABAWASSEE AND UPPER SAGINAW RIVERS

# GeoMorph® OVERVIEW OF ITERATIVE INVESTIGATION PROCESS

#### Tittabawassee and Upper Saginaw Rivers

# Daily Review (GeoMorph® Field Crews With Field Manager)

#### FIELD INFORMATION ON SOIL CHARACTERISTICS, MORPHOLOGY AND LITHOLOGY

Evaluate continuity of soil profiles and morphology during the sampling activities

#### FIELD INFORMATION ON GEOMORPHOLOGY

Confirm geomorphic features based upon field observations of soils and other field characteristics

### Weekly Review (GeoMorph® Project Team)

Post boring logs to cross sections and review raw cross sections

Review broader observations and changes to geomorphic and fluvial deposition interpretations

#### **Upon Receipt Of 1613-TRP/RT Data From A Geomorphic Feature**

#### DATA INPUT INTO DATABASE

#### REVIEW OF ANALYTICAL DATA

Professional review of analytical data and how it relates to geomorphology and DQOs

#### **OUTLIER TEST(S)** (i.e., individual features, like features with in a reach, etc.)

If no outliers are identified, then

KEEP DOCUMENTATION FOR FINAL REPORT AND FOR MDEQ REVIEW AT FIELD MEETING

If outliers are identified, then

CONFIRM ANALYTICAL DATA

EVALUATE THE GEOMORPHIC FEATURE THAT WAS SAMPLED

EVALUATE IF OUTLIER IS SIGNIFICANT

Example: an outlier that is at 15 ppt is not significant

EVALUATE IF ADDITIONAL BORING/SAMPLE LOCATIONS OR FURTHER GEOMORPHIC EVALUATIONS ARE NEEDED

#### **Agenda For MDEQ Field Meetings (frequency to be determined)**

#### DISCUSSION OF MINUTES FROM LAST MEETING

#### REVIEW SAMPLE LOCATIONS COLLECTED SINCE LAST MEETING

SAP sample locations

Additional sample locations

Field lithologic data from new borings

Geomorphic evaluations of sampled areas

#### NEW ANALYTICAL DATA SINCE LAST MEETING

Tabular presentation of analytical data for all analyzed furans and dioxins and calculated TEQ, including confirmatory split sampling available from MDEQ.

Graphical presentation of data divided into categories with divisions (e.g., 90, 500, 1000, and 5000 ppt TEQ).

Review of extent of impact:

HORIZONTAL EXTENT OF IMPACT AWAY FROM THE RIVER

VERTICAL EXTENT DEFINED BY THE BORINGS

REVIEW POTENTIAL ADDITIONAL SAMPLE LOCATIONS AND GEOMORPHIC SURFACE SUBDIVISION TO ADEQUATELY DEFINE EXTENT

Review complete analytical data sets for Geomorphic Surfaces:

REVIEW OUTLIER TEST DOCUMENTATION INCLUDING GRAPHICAL AND NUMERICAL OUTPUT

REVIEW DATA SETS WITH NO OUTLIERS

REVIEW DATA SETS WITH AN IDENTIFIED OUTLIER

Evaluation of the data set and the outlier

Identify response to address outlier

#### UPCOMING AND REMAINING FIELD WORK

**SAP Sample Locations** 

**Additional Sample Locations** 

Modifications to Geomorphic Feature Configurations

**Modifications to Proposed Locations** 

PROPERTY ACCESS AND CLEARANCES ISSUES

MDEQ Split Sampling or Field Observation Plans

#### SUMMARY OF AGREEMENTS REACHED DURING SCHEDULED MEETING